Attachment 1

Federal Register Notice

[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 50 and 72

RIN 3150-AF98

Reporting Requirements for

Nuclear Power Reactors

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission is proposing to amend the event reporting requirements for nuclear power reactors: to update the current rules, including reducing or eliminating the reporting burden associated with events of little or no safety significance; and to better align the rules with the NRC's needs for information to carry out its safety mission, including revising reporting requirements based on importance to risk and extending the required reporting times consistent with the time it is needed for prompt NRC action. Also, a draft report, NUREG-1022, Revision 2, is being made available for public comment concurrently with the proposed amendments.

DATES: Submit comments (75 days after publication in the Federal Register). Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

ADDRESSES: Mail comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. ATTN: Rulemakings and Adjudications Staff.

Deliver comments to: 11555 Rockville Pike, Rockville, Maryland, between 7:30 am and 4:15 p.m. Federal workdays.

Electronic comments may be provided via the NRC's interactive rulemaking website through the NRC home page (http://www.nrc.gov). From the home page, select "Rulemaking" from the tool bar at the bottom of the page. The interactive rulemaking website can then be accessed by selecting "Rulemaking Forum." This site provides the ability to upload comments as files (any format), if your web browser supports that function. For information about the interactive rulemaking website, contact Ms. Carol Gallagher, (301) 415-5905; e-mail CAG@nrc.gov.

Certain documents related to this rulemaking, including comments received, the transcripts of public meetings held, the draft regulatory analysis and the draft report NUREG-1022, Revision 2 may be examined at the NRC Public Document Room, 2120 L Street, N.W., (Lower Level), Washington, DC. These same documents also may be viewed and downloaded electronically via the interactive rulemaking web site established by NRC for this rulemaking.

FOR FURTHER INFORMATION CONTACT: Dennis P. Allison, Office of Nuclear Reactor Regulation, Washington, DC 20555-0001, telephone (301) 415-6835, e-mail dpa@nrc.gov.

SUPPLEMENTARY INFORMATION:

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1. Background

Section 50.72 has been in effect, with minor modifications, since 1983. Its essential purpose is ".... to provide the Commission with immediate reporting of .... significant events where immediate Commission action to protect the public health and safety may be required or where the Commission needs timely and accurate information to respond to heightened public concern." (48 FR 39039; August 29, 1983).

Section 50.73 has also been in effect, with minor modification, since 1983. Its essential

purpose is to identify ".... the types of reactor events and problems that are believed to be significant and useful to the NRC in its effort to identify and resolve threats to public safety. It is designed to provide the information necessary for engineering studies of operational anomalies and trends and patterns analysis of operational occurrences. The same information can be used for other analytic procedures that will aid in identifying accident precursors." (48 FR 33851; July 26, 1983).

(2) Rulemaking Initiation

Experience has shown a need for change in several areas. On July 23, 1998 (63 FR 39522) the NRC published in the Federal Register an advance notice of proposed rulemaking (ANPR) to announce a contemplated rulemaking that would modify reporting requirements for nuclear power reactors. Among other things, the ANPR requested public comments on whether the NRC should proceed with rulemaking to modify the event reporting requirements in 10 CFR 50.72, "Immediate notification requirements for operating nuclear power reactors," and 50.73, "Licensee event report system," and several concrete proposals were provided for comment.

A public meeting was held to discuss the ANPR at NRC Headquarters on August 21, 1998. The ANPR was also discussed, along with other topics, at a public meeting on the role of industry in nuclear regulation in Rosemont, Illinois on September 1, 1998. The public comment period on the ANPR closed on September 21, 1998. A comment from the Nuclear Energy Institute (NEI) proposed conducting "table top exercises" early in the development and review process to test key parts of the requirements and guidance for clarity and consistency. That comment was accepted and a third public meeting was held on November 13, 1998 to discuss issues of clarity and consistency in the contemplated approach. Transcripts of these meetings

are available for inspection in the NRC Public Document Room or they may be viewed and downloaded electronically via the interactive rulemaking web site established by NRC for this rulemaking, as discussed above under the heading "ADDRESSES." Single copies may be obtained from the contact listed above under the heading "For Further Information Contact."

III. Analysis of Comments

The comment period for the ANPR expired September 21, 1998. Twenty-one comment letters were received, representing comments from sixteen nuclear power plant licensees (utilities), two organizations of utilities, two States and one public interest group. A list of comment letters is provided below. The comment letters expressed support for amending the rules along the general lines of the objectives discussed in the ANPR. Most of the letters also provided specific recommendations for changes to the contemplated amendments discussed in the ANPR. In addition to the written comments received, the ANPR has been the subject of three public meetings as discussed above under the heading "Background," and comments made at those meetings have also been considered.

The resolution of comments is summarized below. This summary addresses the principal comments (i.e., comments other than those that are: minor or editorial in nature; supportive of the approach described in the ANPR; or applicable to another area or activity outside the scope of sections 50.72 and 50.73).

Comment 1: Several comments recommended amending 10 CFR 50.73 to allow 60 days (instead of the current 30 days) for submittal of Licensee Event Reports (LERs). They indicated that this would allow a more reasonable time to determine the root causes of events and lead to fewer amended reports.

Response: The comments are accepted for the reason stated above. The proposed rule would change the time limit to 60 days.

Comment 2: Two comments suggested a need to establish starting points for reporting time clocks that are clear and not subject to varied interpretations.

Response: The reporting guidelines in this area have been reviewed for clarity. Some editorial clarifications are proposed in Section 2.5 of the draft of Revision 2 to NUREG-1022, which is being made available for public comment concurrently with the proposed rule, as discussed below under the heading "Revisions to Reporting Guidelines in NUREG-1022."

Comment 3: Many comments opposed adopting a check the box approach for human performance and other information in LERs (as was proposed in the ANPR, with the objective of reducing reporting burden). They indicated that adopting a check the box approach would result in substantial implementation problems, and recommended continuing to rely on the narrative description which provides adequate information. One comment opposed the idea of a check the box approach on the grounds that it would make LERs more difficult for the general public to understand. A few comments supported the check the box approach.

Response: The intent of the check the box approach was to reduce the effort required in reporting; however, the majority of comments indicate this would not be the case. Accordingly, the proposed rule does not reflect adoption of a check the box approach.

Comment 4: Several comments opposed codifying the current guidelines for reporting human performance information in LERs (i.e., adding the detailed guidelines to the rule, as was proposed in the ANPR). They recommended leaving the rule unchanged in this regard,

indicating that sufficient information is being provided under the current rule and guidelines.

Response: The comments are partially accepted. The proposed rule would not codify the reporting guidelines (as proposed in the ANPR) for the reasons stated above.

However, the proposed rule would simplify the requirement. It is not necessary to specify the level of detail provided in the current rule. Accordingly, the amended paragraph would simply require a discussion of the causes and circumstances for any human performance related problems that contributed to the event. Details would continue to be provided in the reporting guidelines, as indicated in Section 5.2.1 of the draft of Revision 2 to NUREG-1022. This draft report is being made available for public comment concurrently with the proposed rule, as discussed below under the heading "Revisions to Reporting Guidelines in NUREG-1022."

Comment 5: Several comments opposed codifying a list of specific systems for which actuation must be reported (by naming the systems in 10 CFR 50.72 and 50.73, as was proposed in the ANPR). They indicated that a system's contribution to risk can vary widely from plant to plant, which precludes construction of a valid universal list. They recommended that, instead, actuation be reported only for those systems that are specified to be engineered safety features (ESFs) in the final safety analysis report (FSAR).

Response: The proposed rule would include a list of systems for which actuation would be reported. However, the concern is recognized and public comment will be specifically invited on several alternatives to the proposed rule.

Comment 6: Several comments opposed changing the criteria in 10 CFR 50.72 and 50.73 which require reporting any *event or condition that alone could have prevented the fulfillment of the safety function of structures or systems ....* The change proposed in the ANPR would have substituted the phrase "alone or in combination with other existing conditions" for the word "alone" in this criterion. The comments indicated that this would add confusion, the

rule as currently worded is sufficiently clear, and the need to consider other existing plant conditions in evaluating reportability is understood and uniformly implemented. They recommended leaving the rule unchanged in this regard.

Response: The comments are partially accepted. The requirement would not be changed by substituting the phrase "alone or in combination with other existing conditions" for the word "alone" in this criterion (as proposed in the ANPR).

However, the proposed amendments would change the rules by deleting the word "alone," so that they would require reporting "any event or condition that could have prevented fulfillment of the safety function of structures or systems ..." This would simplify the wording, rather than making it more complicated. It is not intended to change the meaning of the requirement, but to make the meaning more apparent in the wording of the rule. The following points, which are relevant to this question, would continue to be made clear in the reporting guidelines. See Section 3.2.7 of the draft of Revision 2 to NUREG-1022, which is being made available for public comment concurrently with the proposed rule, as discussed below under the heading "Revisions to Reporting Guidelines in NUREG-1022."

(1) It is not necessary to assume an additional random single failure in evaluating reportability. (If such an assumption were necessary, inoperability of a single train would generally be reportable under this criterion.)

(2) It is necessary to consider other existing conditions in determining reportability. (For example, if Train A fails at a time when Train B is out of service for maintenance, the event is reportable.)

(3) The event is reportable regardless of whether or not a system was called upon to perform its safety function. (For example, if an emergency core cooling system [ECCS] was incapable of performing its specified safety functions, the event is reportable even if there was no call for the ECCS function.)

(4) The event is reportable regardless of whether or not a different system was capable of performing the safety function. (For example, if the onsite power system failed, the event is reportable even if the offsite power system was available and capable of performing its safety functions.)

Comment 7: Several comments recommended changing 10 CFR 50.72 and 50.73 to exclude reporting an invalid actuation of an ESF. (An invalid actuation is one that does not result from a plant condition that warrants ESF initiation.)

Response: The comments are partially accepted. The proposed amendments would eliminate the requirement for telephone notification of an invalid actuation under 10 CFR 50.72. Invalid actuations are generally less significant than valid actuations because they do not involve plant conditions (e.g., low reactor coolant system pressure) conditions that would warrant system actuation. Instead, they result from other causes such as a dropped electrical lead during testing).

However, the proposed amendments would not eliminate the requirement for a written report of an invalid actuation under 10 CFR 50.73. There is still a need for reporting of invalid actuations because they are needed to make estimates of equipment reliability parameters, which in turn are needed to support the Commission's move towards risk-informed regulation. This is discussed further in a May 7, 1997 Commission paper, SECY-97-101, "Proposed Rule, 10 CFR 50.76, Reporting Reliability and Availability Information for Risk-significant Systems and Equipment," Attachment 3.

Comment 8: Several comments recommended changing 10 CFR 50.72 and 50.73 to limit certain reports to current events and conditions. That is, they recommended that *an event or condition that could have prevented the fulfillment of the safety function of structures or systems ....* be reported:

(1) by telephone under 10 CFR 50.72(b)(2)(iii) only if it currently exists, and

(2) by written LER under 10 CFR 50.73(a)(2)(v) only if it existed within the previous two years.

For a "historical" event or condition of this type (i.e., one which might have been significant at one time but has since been corrected) there is less significance than there is for a current event and, thus, immediate notification under 50.72(b)(2)(iii) is not warranted. With regard to 50.73(a)(2)(v), two years encompasses at least one operating cycle. Considerable resources are expended when it is necessary to search historical records older than this to make past operability determinations, and this is not warranted by the lesser significance of historical events older than two years.

Response: The comments are partially accepted, for the reasons stated above. That is, under the proposed rules, an *event or condition that could have prevented the fulfillment of the safety function of structures or systems* ... would be reported by telephone under 10 CFR 50.72(b)(2)(iii) only if it exists at the time of discovery. An *event or condition that could have prevented the fulfillment of the safety function of structures or systems ….* would be reported by written LER under 10 CFR 50.73(a)(2)(v) only if it existed within the previous three years.

In addition, although not recommended in the comments, under the proposed rule an *operation or condition prohibited by the plant's Technical Specifications* would be reported under 50.73(a)(2)(i)(b) only if it existed within the previous three years. For this criterion as well, considerable resources are expended when it is necessary to search historical records older than three years to make past operability determinations, and this is not warranted by the lesser significance of historical events older than three years.

Three years is proposed, rather than two years as suggested in the comments, because the NRC staff trends plant performance indicators over a period of three years to ensure inclusion of periods of both shut down and operation.

Comment 9: Several comments opposed using the term risk-significant (or significant) in the absence of a clear definition.

Response: The term "significant" would be used in two criteria in the proposed rules. In the first criterion, sections 50.72 and 50.73 would require reporting an unanalyzed condition that significantly affects plant safety. In this context the term "significant" would be defined by examples, five of which are discussed below under the heading "Condition that is outside the design basis of the plant." In the second criterion, section 50.73 would require reporting when a component's ability to perform its safety function is significantly degraded and the condition could reasonably be expected to affect other similar components in the plant. Again, the term "significant" would be defined by examples, six of which are discussed below under the heading "Significantly degraded components."

Comment 10: Several comments recommended changing 10 CFR 50.72 and 50.73 to exclude reporting of an *unanalyzed condition that significantly compromised plant safety* on the basis that it is redundant to other reporting criteria.

Response: The comment is not accepted. Several types of worthwhile reports have been identified that could not readily be captured by other criteria as discussed further below under the heading “Condition that is outside the design basis of the plant."

Comment 11: Several comments recommended amending 10 CFR 50.72 and 50.73 to exclude reporting of a seriously degraded principal safety barrier on the basis that it is redundant to other reporting criteria.

Response: The comments are not accepted. This criterion captures some worthwhile reports that would not be captured by other criteria, such as significant welding or material defects in the primary coolant system. However, some clarifications are proposed in Section 3.2.4 of the draft reporting guidelines, to better indicate which events are serious enough to qualify for reporting under this criterion.

Comment 12: One comment recommended that, with regard to a condition or operation prohibited by the plant's Technical Specifications, reporting should be eliminated for violation of all administrative Technical Specifications.

Response: The comment is partially accepted. The proposed rule would eliminate reporting for Technical Specifications that are administrative in nature. The reporting guidelines would not change. As stated in the current reporting guidelines in NUREG-1022, Revision 1, failure to meet administrative Technical Specifications requirements is reportable only if it results in violations of equipment operability requirements, or had a similar detrimental effect on a licensee's ability to safely operate the plant. For example, operation with less than the required number of people on shift would constitute operation prohibited by the Technical Specifications. However, a change in the plant's organizational structure that has not yet been approved as a Technical Specification change would not. An administrative procedure violation or failure to implement a procedure, such as failure to lock a high radiation area door, that does not have a direct impact on the safe operation of the plant, is generally not reportable under this criterion.

Comment 13: One comment recommended changing 10 CFR 50.73 to require that LERs identify: (1) how many opportunities to detect the problem were missed and (2) corrective actions to prevent future misses.

Response: No changes are proposed. If missed opportunities are identified and are significant to the event, they should be captured by the current requirements to provide a comprehensive description of the event and to describe corrective actions if they are significant to the event.

Comment 14: With regard to design issues, one comment recommended including language in the rules or their statements of considerations encouraging a voluntary report under 10 CFR 50.9 for a newly discovered design issue which is not otherwise reportable at the

plant where first discovered (because the affected systems can still perform their specified safety functions) but which might have a significant impact on generic design issues at other plants.

Response: A statement encouraging submittal of voluntary LERs is included in the reporting guidelines. In addition, the guidelines would indicate that any significant degradation that could reasonably be expected to affect multiple similar components in the plant should be reported.

Comment 15: Several comments opposed placing a condition, related to systematic non-compliance, on the elimination of reporting of late surveillance tests (as proposed in the ANPR) under 10 CFR 50.73. The condition would be burdensome because licensees would need to track instances of missed surveillance tests in given time periods.

Response: The proposed rule does not contain this condition. Reporting for the purpose of identifying systematic non-compliance is not needed because NRC resident inspectors routinely review plant problem lists, and thus would be aware of any systematic non-compliance in this area if it occurs.

Comment 16: One comment recommended changing the rules to allow licensees to rely on notifications made to resident inspectors, which could eliminate the need to make a telephone notification via the emergency notification system (ENS) and/or submit a written LER, at least for some events or conditions. They indicated, for example, this should be adequate where the event is a decision to issue a news release.

Response: No changes are proposed. Telephone notifications to the NRC Operations Center, when required, are needed to ensure that the event can be promptly reviewed. This includes notification of the NRC Headquarters Emergency Officers and the Regional Duty Officer and consideration of whether to activate NRC incident response procedures. Written LERs, when required, are needed to ensure that events can be systematically reviewed for

safety significance.

Comment 17: Some comments opposed amending 10 CFR 50.73 to require additional information regarding equipment availability for shutdown events (as proposed in the ANPR) to support staff probablistic risk assessments (PRAs). They indicated that it is rare that sufficient information is not available in an LER.

Response: The proposed rule would require such information. Frequently, when shutdown events are subjected to a probabilistic risk analysis, it is necessary to call the plant to determine the status of systems and equipment. The proposed rule would eliminate much of that need.

Comment 18: Several comments recommended deleting 10 CFR 50.72(b)(2)(i), "Any event found while the reactor is shut down, that, had it been found while the reactor was in operation, would have resulted in the nuclear power plant, including its principal safety barriers, being seriously degraded or being in an unanalyzed condition that significantly compromises plant safety." The comments indicated that because the plant would be shutdown, there is no need for immediate NRC action.

Response: The requirement for telephone reporting would not be entirely eliminated because, if a principal safety barrier is significantly degraded or a condition that significantly affects plant safety exists; the event may be significant enough that the NRC would need to initiate actions [such as contacting the plant to better understand the event and/or initiating a special inspection or investigation] within about a day even if the plant is shutdown.

However, in the proposed rule this specific criterion would be combined with 10 CFR 50.72(b)(1)(ii), "Any event or condition during plant operation that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded or ..." Also, the term "unanalyzed condition that significantly compromises plant safety" would be deleted. In combination with other changes, this would result in the following criterion for telephone

notification "Any event or condition that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded."

Comment 19: Some comments recommended that the NRC use enforcement discretion during the rulemaking process to provide early relief with regard to reporting a condition *outside the design basis of the plant* and/or a late surveillance test *(condition or operation prohibited by Technical Specifications).*

Response: The current rules will continue to apply until final revised rules are issued and become effective. However in dispositioning any violation, the risk- and safety-significance of the violation will be an important consideration. Establishing an interim enforcement discretion policy would involve the same critical elements as developing the revised rule and guidance including a provision for public comment. This would complicate the rulemaking process, and essentially constitute a prediction of its final outcome, which may or may not turn out to be correct.

Comment 20: Several comment letters opposed the idea of tying enforcement criteria (i.e., violation severity levels) to reporting criteria. They indicated this could have an unintended adverse effect on reporting and the resources consumed because in matching an event with a reporting criterion, a licensee would essentially be forced to make a preliminary determination of severity level.

Response: The comments are not accepted. The proposed changes to the enforcement criteria, are discussed below under the heading “Enforcement.”

Comment 21: As requested by the ANPR, a number of comments identified reactor reporting requirements other than sections 50.72 and 50.73 where changes are warranted.

Response: Comments regarding changes to reactor reporting requirements other than sections 50.72 and 50.73 will be addressed in a separate action. A Commission paper on that subject was submitted on January 20, 1999, SECY-99-022, "Rulemaking to Modify Reporting

Requirements for Power Reactors" and the Commission issued a Staff Requirements Memorandum on March 19, 1999 directing the staff to proceed with planning and scheduling.

Comment 22: One comment recommended changing the required initial reporting time for some events to ".... within 8 hours or by the beginning of the next business day," instead of simply specifying ".... within 8 hours." The comment indicated it does not appear that the NRC takes action on these events during non-business hours.

Response: The comment is not accepted. The NRC needs these reports in time to call the plant to find out more about the event and/or initiate a special inspection or an investigation, if warranted, within a day. Sometimes these actions are taken during non-business hours.

Comment 23: One comment recommended that an *event or condition that could have prevented fulfillment of the safety function of structures or systems ....* should be reportable only when the time limits of the TS are exceeded. It indicated that if the time limits are not exceeded the event is not significant enough to warrant reporting.

Response: The comment is not accepted. Generally, standard TS require commencement of shutdown within one hour if an important system, such as emergency ac power, is inoperable. However, the stated reason for allowing one hour before commencing the shutdown is to provide time to prepare for an orderly shutdown. Also, the condition might have lasted much longer than one hour before it was discovered. Finally, an event that results in a safety system failure (or inability to perform its function) is generally significant enough to warrant NRC review.

Comment 24: One comment from the State of Ohio recommended that, although rule changes are not necessary, emphasis should be placed on positive notification of State and local agencies of emergency conditions before calling the NRC.

Response: The comment is accepted. It arose from a weakness in the NRC's response to an event at the Davis-Besse plant. Because there were considerable difficulties in establishing telephone communications with the plant at the time of the event, NRC Operations Center personnel requested that the licensee remain on the line and said that the NRC would notify the State. However, the NRC did not do so in a timely manner. Training and procedure changes have been implemented to ensure this type of problem will not reoccur.

Comment 25: One comment letter, from the State of Illinois, stated the following: "In section 50.72 of the advance notice of proposed rulemaking, seven non-emergency events listed as (f), are proposed to be reported in eight hours instead of one hour. Of those seven events, six (specifically, (ii), (iii), (iv), (v), (vi), and (vii)) would probably be classified as emergency events under existing emergency plans at an Illinois site .... This will cause reporting confusion during an event at a time when clarity is necessary. These six events should all be reported as emergency events, not non-emergency events. EAL thresholds in licensee emergency plans should be required to reflect them clearly. All of these events would affect the State of Illinois' response and our emergency plans. NRC must reconsider the categories of non-emergency events in the context of the current guidance to licensees for classifying EALs to ensure there is a clear distinction between emergency and non-emergency reportable events."

Response: Section 50.72 has been reviewed, and appears to be clear in this regard. It indicates the following:

(1) any declaration of an Emergency Class is reportable pursuant to 10 CFR 50.72(a)(1)(i) and (a)(3),

(2) the conditions listed in paragraph (b)(1), "One-hour reports," are reportable pursuant to paragraph (b)(1) if not reported as a declaration of an Emergency Class under paragraph (a), and

(3) the conditions listed in paragraph (b)(2), "Eight-hour reports, are reportable pursuant to paragraph (b)(2), if not reported under paragraphs (a) or (b)(1).

Comment 26: One comment letter, from the State of Illinois, opposed relaxing the required initial reporting time from 4 hours to 8 hours for the following types of events:

(i) Airborne radioactive release that results in concentrations over 20 times allowable levels in an unrestricted area;

(ii) Liquid effluent in excess of 20 times allowable concentrations released to an unrestricted area;

(iii) Radioactively contaminated person transported to an offsite medical facility for treatment;

(iv) News release or other government agency notification related to the health and safety of the public or onsite personnel, or protection of the environment.

The comment further indicated: "It is of paramount importance that those charged with regulating and monitoring the public impact of radiological releases are being kept informed of unplanned releases in a timely manner. Illinois law requires that we perform independent assessments, decide what actions may be necessary to protect the public, and assist in informing the public regarding any radiological risk. Should follow-up action to a release be necessary, then the less time that has elapsed, the better the state is able to respond in a timely and appropriate manner. We oppose any reduction in notification requirements for unplanned radiation releases from a site regardless of the source or quantity.

Timeliness is also important for items of obvious public interest. News of seemingly small events spreads quickly, particularly in local communities around the power plants. Delayed reporting of such events means that we will be unprepared to respond to queries from local officials, or the media, with a resultant loss of public confidence. Therefore, we also oppose any reduction in notification requirements for newsworthy events."

Response: In the interest of simplicity, the proposed amendments would maintain just three basic levels of required reporting times in 10 CFR 50.72 and 50.73 (1 hour, 8 hours, and 60 days). However, the concern is recognized and public comment is specifically invited on the question of whether additional levels should be introduced to better correspond to particular types of events, as discussed below under the heading “Required Initial Reporting Times.” Also, if in a final rule the NRC should relax the time limit to 8 hours, a State would not be precluded from obtaining reports earlier than 8 hours.

Comment 27: Two comment letters addressed coordination with States. The comment letter from Florida Power & Light Company stated "The NRC's Public workshop on August 21, 1998, touched on a number of examples where opportunities exist to reduce reporting burdens. An industry representative commented that licensees sometimes have to report the same event to state agencies and the NRC provided one such example. FPL concurs with the recommendation that the time requirement for reporting an event to the NRC and to the state should be consistent wherever practical and possibly in some cases eliminated."

The comment letter from Northeast Nuclear Energy Company stated "Northeast Nuclear Energy Company agrees with extending the non-emergency prompt notifications to eight hours. This would help to eliminate unnecessary reports and retractions. However, it is necessary to have the individual states closely involved with the rule change since they may have requirements that are more restrictive or conflict with the proposed rulemaking. For example, in Connecticut all 10 CFR 50.72 reports require notification of the state within one hour."

Response: The ANPR specifically requested State input. In addition, a letter requesting input was sent to each State. Written comments were received from the State of Ohio and the State of Illinois. In addition, representatives from several States attended one of the public meetings on the ANPR. The NRC will continue to solicit State input as the rulemaking process proceeds.

Comment 28: One comment recommended eliminating two of the requirements for immediate followup notification during the course of an event, section 50.72(c)(2)(i), *the results of ensuing evaluations or assessments of plant conditions*, and section 50.72(c)(2)(ii), *the effectiveness of response or protective measures taken*. The comment indicated that the requirements continue to apply after the event and that they require reporting even if, for example, the result of a further analysis does not change the initial report.

Response: The comment is not accepted. The requirements for followup reporting apply only during the course of the event. Followup reports are needed while the event is ongoing. For example, if an analysis is completed during an ongoing event, and it confirms an earlier estimate of how long it will take to uncover the reactor core if electric power is not restored, that information may very well be useful for the purpose of evaluating the need for protective measures (evacuation).

Comment 29: One comment recommended clarifying the reporting requirements for problems identified by NRC inspectors.

Response: No changes are proposed. The current reporting guidelines include a paragraph making it clear that an event must be reported via telephone notification and/or written LER, as required, regardless of whether it had been discussed with NRC staff personnel or was identified by NRC personnel.

Comment 30: Several comments recommended changing the requirements in 50.46(a)(iii)(2) for reporting errors in or corrections to ECCS analyses.

Response: These comments will be addressed in a separate action (along with other comments on reporting requirements other than sections 50.72 and 50.73).

Comment 31: Some comments raised issues regarding plant-specific reporting requirements contained in Technical Specifications (or other parts of the operating license). One suggestion was that 10 CFR 50.72 and 50.73 should be changed to address these issues.

Another suggestion was that a Generic Letter be issued indicating that the NRC would be receptive to requests for license amendments to eliminate specific reporting requirements.

Response: No changes are proposed for sections 50.72 and 50.73, which identify generic reporting requirements. It is not feasible or appropriate to address the specific reporting requirements contained in individual operating licenses in this format.

The idea of issuing a generic communication to specific requests for license amendments will be addressed (along with other comments on reporting requirements beyond the scope of sections 50.72 and 50.73) in a separate action.

Comment 32: One comment recommended that in section 50.72(b)(1)(v), the word "offsite" be added before "communications capability" to make it clear that what must be reported is a loss of communications with outside agencies, not internal plant communications systems.

Response: The comment is accepted. In the proposed rule the word "offsite" would be added.

Comment 33: Several comments suggested that the NRC should define its needs relative to the information provided in LERs.

Response: The essential purpose of the LER rule is to identify the types of reactor events and problems that are believed to be significant and useful to the NRC in its effort to identify and resolve threats to public safety. The rule is designed to provide the information necessary for engineering studies of operational anomalies and trends, and patterns analysis of operational occurrences. To this end, the information required in LERs is generally needed to understand the event, its significance, and its causes in order to determine whether generic or plant specific action is needed to preclude recurrence. Some further specific functions are discussed below.

It is necessary to identify and analyze events and conditions that are precursors to potential severe core damage, to discover emerging trends or patterns of potential safety significance, to identify events that are important to safety and their associated safety concerns and root causes, to determine the adequacy of corrective actions taken to address the safety concerns, and to assess the generic applicability of events.

The NRC staff reviews each LER to identify those individual events or generic situations that warrant additional analysis and evaluation. The staff identifies repetitive events and failures and situations where the frequency or the combined significance of reported events may be cause for concern. The NRC staff reviews past operating history for similar events and initiates a generic study, as appropriate, to focus upon the nature, cause, consequences and possible corrective actions for the particular situation or concern.

The NRC staff uses the information reported in LERs in confirming licensing bases, studying potentially generic safety problems, assessing trends and patterns of operational experience, monitoring performance, identifying precursors of more significant events, and providing operational experience to the industry.

The NRC determines whether events meet the criteria for reporting as an Abnormal Occurrence Report to Congress or for reporting to the European Nuclear Energy Agency (NEA).

The information from LERs is widely used within the nuclear industry, both nationally and internationally. The industry's Institute of Nuclear Power Operation (INPO) uses LERs as a basis for providing operational safety experience feedback data to individual utilities through such documents as significant operating experience reports, significant event reports, significant events notifications, and operations and maintenance reminders. U.S. vendors and nuclear steam system suppliers, as well as other countries and international organizations, use LER data as a source of operational experience data.

Comment 34: Some comments indicated that the licensing basis should be defined.

Response: No changes are proposed. The term "licensing basis" is not explicitly used in the event reporting rules or the draft reporting guidelines. It can come into play, via Generic Letter (GL) 91-18, "Information to Licensees Regarding two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability," in determining what the "specified safety function" of a system is. This relates to whether an event is reportable as an *event or condition that could have prevented the fulfillment of the safety function of structures or systems ....* and/or an *operation or condition prohibited by the plant's technical specification (TS).* However, any unsettled details regarding exactly which commitments are included in the licensing basis (for example because of differences between the definitions in GL 91-18 and 10 CFR 54.3) are not of a nature that would change the determination of whether or not a system is capable of performing its specified safety functions (i.e., operable).

Comment 35: Several comments recommended conducting tabletop exercises (public meetings) early in the drafting process, involving licensees, inspectors, and headquarters personnel to discuss the draft amendments and associated and guidance.

Response: The Commission agrees. The recommended public meeting was held on November 13, 1998.

Comment 36: Several comments recommended conducting a workshop (public meeting) early during the public comment period to discuss the proposed rule and draft guidance.

Response: The Commission agrees. The recommended workshop has been added to the schedule.

Comment 37: Several comments recommended that the reporting guidelines be revised concurrently with the rules.

Response: The Commission agrees. Draft guidelines are being made available for comment concurrent with the proposed rules.

Comment 38: Several comment letters recommended reviewing enforcement criteria at the same time the rule is being developed to ensure consistent application of enforcement to reporting.

Response: The comment is accepted. The Enforcement Policy is being reviewed concurrently with development of the rule.

IV. Discussion

1. Objectives of Proposed Amendments

The purpose of sections 50.72 and 50.73 would remain the same because the basic needs remain the same. The objectives of the proposed amendments would be as follows:

(1) To better align the reporting requirements with the NRC's current reporting needs. An example is extending the required initial reporting times for some events, consistent with the need for timely NRC action. Another example is changing the criteria for reporting system actuations, to obtain reporting that is more consistent with the risk-significance of the systems involved.

(2) To reduce the reporting burden, consistent with the NRC's reporting needs. An example is eliminating the reporting of design and analysis defects and deviations of little or no risk- or safety-significance.

(3) To clarify the reporting requirements where needed. An example is clarifying the criteria for reporting design or analysis defects or deviations.

(4) To maintain consistency with NRC actions to improve integrated plant assessments.

For example, reports that are needed in the assessment process should not be eliminated.

2. Section by Section Discussion of Proposed Amendments

General requirements [section 50.72(a)(5)]. The requirement to inform the NRC of the type of report being made (i.e., emergency class declared, non-emergency 1-hour report, or non-emergency 8-hour report) would be revised to refer to paragraph (a)(1) instead of referring to paragraph (a)(3) to correct a typographical error.

Required initial reporting times [sections 50.72(a)(5), (b)(1), (b)(2), and sections 50.73(a)(1) and (d)]. In the proposed amendments, declaration of an emergency class would continue to be reported immediately after notification of appropriate State or local agencies not later than 1-hour after declaration. This includes declaration of an Unusual Event, the lowest emergency class.

Deviations from technical specifications authorized pursuant to 10 CFR 50.54(x) would continue to be reported as soon as practical and in all cases within 1 hour of occurrence. These two criteria capture those events where there may be a need for immediate action by the NRC.

Non-emergency events that are reportable by telephone under 10 CFR 50.72 would be reportable as soon as practical and in all cases within 8 hours (instead of within 1 hour or 4 hours as is currently required). This would reduce the burden of rapid reporting, while still capturing those events where there may be a need for the NRC to contact the plant to find out more about the event and/or initiate a special inspection or investigation within about a day.

Written LERs would be due within 60 days after discovery of a reportable event or condition (instead of within 30 days as is currently required). Changing the time limit from 30 days to 60 days does not imply that licensees should take longer than they previously did to

develop and implement corrective actions. They should continue to do so on a time scale commensurate with the safety significance of the issue. However, for those cases where it does take longer than thirty days to complete a root cause analysis, this change would result in fewer LERs that require amendment (by submittal of an additional report).

The Performance Indicator (PI) program and the future risk-based performance indicator program provide valued input to regulatory decisions (e.g. Senior Management Meetings). Adding 30 days to the delivery of data supplying these programs would result in the reduction in the currency and value of these indicators to senior managers. With respect to the Accident Sequence Precursor program, the additional 30 days will add a commensurate amount of time to each individual event assessment since Licensee Event Reports (LERs) are the main source of data for these analyses. The delivery date for the annual Accident Sequence Precursor report would also slip accordingly. The NRC staff would have to make more extensive use of Immediate Notifications (10 CFR 50.72) and event followup to compensate in part for the Licensee Event Report (LER) reporting extension.

In the interest of simplicity, the proposed amendments would maintain just three basic levels of required reporting times in 10 CFR 50.72 and 50.73 (1 hour, 8 hours, and 60 days). However public comment is specifically invited on the question of whether additional levels should be introduced to better correspond or particular types of events. For example, 10 CFR 50.72 currently requires reporting within 4 hours for events that involve low levels of radioactive releases, and events related to safety or environmental protection that involve a press release or notification of another government agency. These types of events could be maintained at 4 hours so that information is available on a more timely basis to respond to heightened public concern about such events. In another example, events related to environmental protection are sometimes reportable to another agency, which is the lead agency for the matter, with a different time limit, such as 12 hours. These types of events could be

reported to the NRC at approximately the same time as they are reported to the other agency.

Operation or condition prohibited by TS [section 50.73(a)(2)(i)(B)]. The term "during the previous three years" would be added to eliminate written LERs for conditions that have not existed during the previous three years. Such a historical event would now have less significance, and assessing reportability for earlier times can consume considerable resources. For example, assume that a procedure is found to be unclear and, as a result, a question is raised as to whether the plant was ever operated in a prohibited condition. If operation in the prohibited condition is likely, the answer should be reasonably apparent based on the knowledge and experience of the plant's operators and/or a review of operating records for the past three years. The very considerable effort required to review all records older than three years, in order to rule out the possibility, would not be warranted.

In addition, this criterion would be modified to eliminate reporting if the technical specification is administrative in nature. Violation of administrative technical specifications have generally not been considered to warrant submittal of an LER, and since 1983 when the rule was issued the staff’s reporting guidance has excluded almost all cases of such reporting. This change would make the plain wording of the rule consistent with that guidance.

Finally, this criterion would be modified to eliminate reporting if the event consisted solely of a case of a late surveillance test where the oversight is corrected, the test is performed, and the equipment is found to be functional. This type of event has not proven to be significant because the equipment remained functional.

Condition of the nuclear power plant, including its principal safety barriers, being seriously degraded [current sections 50.72(b)(1)(ii) and (b)(2)(i), replaced by new section 50.72(b)(2)(ii), and section 50.73(a)(2)(ii)]. Currently, 10 CFR 50.72(b)(1)(ii) and (b)(2)(i) provide the following distinction: a qualifying event or condition during operation is initially reportable in one hour; a condition discovered while shutdown that would have qualified if it had

it been discovered during operation is initially reportable in four hours. The new 10 CFR 50.72(b)(2)(ii) would eliminate the distinction because there would no longer be separate 1-hour and 4-hour categories of non-emergency reports for this criterion. There would only be 8-hour non-emergency reports for this criterion.

Unanalyzed condition that significantly compromises plant safety [sections 50.72(b)(1)(ii)(A) and (b)(2)(i), and section 50.73(a)(2)(ii)(A); replaced by new section 50.72(b)(2)(ii)(B), and section 50.73(a)(2)(ii)(B)]. Currently, 10 CFR 50.72(b)(1)(ii)(A) and (b)(2)(i) provide the following distinction: a qualifying event or condition during operation is initially reportable in one hour; a condition discovered while shutdown that would have qualified if it had it been discovered during operation is initially reportable in four hours. The new 10 CFR 50.72(b)(2)(ii)(B) would eliminate the distinction because there would no longer be separate 1-hour and 4-hour categories of non-emergency reports for this reporting criterion. There would only be 8-hour non-emergency reports for this criterion.

In addition, the new 10 CFR 50.72(b)(2)(ii)(B) and 50.73(a)(2)(ii)(B) would refer to a condition that significantly affects plant safety rather than a condition that significantly compromises plant safety. This is an editorial change intended to better reflect the nature of the criterion.

Condition that is outside the design basis of the plant [current Section 50.72(b)(2)(ii)(B) and section 50.73(a)(2)(ii)(B)]. This criterion would be deleted. However, a condition outside the design basis of the plant would still be reported if it is significant enough to qualify under one or more of the following criteria.

If a design or analysis defect or deviation (or any other event or condition) is significant enough that, as a result, a structure or system would not be capable of performing its specified safety functions, the condition would be reportable under *sections 50.72(b)(2)(v) and 50.73(a)(2)(v) [i.e., an event or condition that could have prevented the fulfillment of the safety*

function of structures or systems that are needed to: (A) Shut down ...].

For example, during testing of 480 volt safety-related breakers, one breaker would not trip electrically. The cause was a loose connection, due to a lug that was too large for a connecting wire. Other safety related breakers did not malfunction, but they had the same mismatch. The event would be reportable because the incompatible lugs and wires could have caused one or more safety systems to fail to perform their specified safety function(s).

Another example is as follows. An annual inspection indicated that some bearings were wiped or cracked on both emergency diesel generators (EDGs). Although the EDGs were running prior to the inspection, the event would be reportable because there was reasonable doubt about the ability of the EDGs to operate for an extended period of time, as required.

If a design or analysis defect or deviation (or any other event or condition) is significant enough that, as a result, one train of a multiple train system controlled by the plant's TS is not capable of performing its specified safety functions, and thus the train is inoperable longer than allowed by the TS, the condition would be reportable under *section 50.73(a)(2)(i)(B) [i.e., an operation or condition prohibited by TS].*

For example, if it is found that an exciter panel for one EDG lacks appropriate seismic restraints because of a design, analysis or construction inadequacy and, as a result, there is reasonable doubt about the EDG's ability to perform its specified safety functions during and after an SSE, the event would be reportable.

Or, for example, if it is found that a loss of offsite power could cause a loss of instrument air and, as a result, there is reasonable doubt about the ability of one train of the auxiliary feedwater system to perform its specified safety functions for a certain postulated steam line breaks, the event would be reportable.

If a condition outside the design basis of the plant (or any other unanalyzed condition) is significant enough that, as a result, plant safety is significantly affected, the condition would be reportable under *sections 50.72(b)(2)(ii)(B) and 50.73(a)(2)(ii)(B) [i.e., an unanalyzed condition that significantly affects plant safety].*

As was previously indicated in the 1983 Statements of Considerations for 10 CFR 50.72 and 50.73, with regard to an *unanalyzed condition that significantly compromises plant safety*, "The Commission recognizes that the licensee may use engineering judgment and experience to determine whether an unanalyzed condition existed. It is not intended that this paragraph apply to minor variations in individual parameters, or to problems concerning single pieces of equipment. For example, at any time, one or more safety-related components may be out of service due to testing, maintenance, or a fault that has not yet been repaired. Any trivial single failure or minor error in performing surveillance tests could produce a situation in which two or more often unrelated, safety-grade components are out-of-service. Technically, this is an unanalyzed condition. However, these events should be reported only if they involve functionally related components or if they significantly compromise plant safety."[1]

"When applying engineering judgment, and there is a doubt regarding whether to report or not, the Commission's policy is that licensees should make the report."[2]

"For example, small voids in systems designed to remove heat from the reactor core which have been previously shown through analysis not to be safety significant need not be reported. However, the accumulation of voids that could inhibit the ability to adequately remove heat from the reactor core, particularly under natural circulation conditions, would constitute an unanalyzed condition and would be reportable."[3]

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[1] 48 FR 39042, August 29, 1983 and 48 FR 33856, July 26, 1983.

[2] 48 FR 39042, August 29, 1983.

[3] 48 FR 39042, August 29, 1983 and 48 FR 33856, July 26, 1983.

"In addition, voiding in instrument lines that results in an erroneous indication causing the operator to misunderstand the true condition of the plant is also an unanalyzed condition and should be reported."[4]

Furthermore, beyond the examples given in 1983, examples of reportable events would include discovery that a system required to meet the single failure criterion does not do so.

In another example, if fire barriers are found to be missing, such that the required degree of separation for redundant safe shutdown trains is lacking, the event would be reportable. On the other hand, if a fire wrap, to which the licensee has committed, is missing from a safe shutdown train but another safe shutdown train is available in a different fire area, protected such that the required separation for safe shutdown trains is still provided, the event would not be reportable.

If a condition outside the design basis of the plant (or any other event or condition) is significant enough that, as a result, a principal safety barrier is seriously degraded, it would be reportable under *sections 50.72(b)(2)(ii)(A) and 50.73(a)(2)(ii)(A) [i.e., any event or condition that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded].* This reporting criterion applies to material (e.g., metallurgical or chemical) problems that cause abnormal degradation of or stress upon the principal safety barriers (i.e., the fuel cladding, reactor coolant system pressure boundary, or the containment) such as:

(i) Fuel cladding failures in the reactor, or in the storage pool, that exceed expected values, or that are unique or widespread, or that are caused by unexpected factors.

(ii) Welding or material defects in the primary coolant system which cannot be found acceptable under ASME Section XI, IWB-3600, "Analytical Evaluation of Flaws" or ASME Section XI, Table IWB-3410-1, "Acceptance Standards."

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[4] 48 FR 39042, August 29, 1983 and 48 FR 33856, July 26, 1983.

(iii) Steam generator tube degradation in the following circumstances:

(1) The severity of degradation corresponds to failure to maintain structural safety factors. The structural safety factors implicit in the licensing basis are those described in Regulatory Guide 1.121. These safety factors include a margin of 3.0 against gross failure or burst under normal plant operating conditions, including startup, operation in the power range, hot standby, and cooldown, and all anticipated transients that are included in the plant design specification.

(2) The calculated potential primary-to-secondary leak rate is not consistent with the plant licensing basis. The licensing basis accident analyses typically assume [for accidents other than a steam generator tube rupture (SGTR)] a 1 gpm primary-to-secondary leak rate concurrent with the accident to demonstrate that the radiological consequences satisfy 10 CFR Part 100 and GDC-19. In these instances, degradation which may lead to leakage above 1 gpm under accident conditions, other than a SGTR, would exceed the threshold. For some units, the staff has approved accident leakages above 1 gpm subject to updating the licensing basis accident analyses to reflect this amount of leakage and subject to risk implications being acceptable.[5]

(iv) Low temperature over pressure transients where the pressure-temperature relationship violates pressure-temperature limits derived from Appendix G to 10 CFR Part 50 (e.g., TS pressure-temperature curves).

(v) Loss of containment function or integrity, including containment leak rate tests where the total containment as-found, minimum-pathway leak rate exceeds the limiting condition for

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[5] In addition, if the extent of degradation is great (i.e., if many tubes are degraded or defective), a telephone notification and a written LER should be provided. The plant's TS typically provide specific requirements indicating when reporting is required (based on the number of tubes degraded or defective in terms of 'percent inspected') and those requirements should be used to determine reportability.

operation (LCO) in the facility's TS.[6]

Finally, a condition outside the design basis of the plant (or any other event or condition) would be reportable if a component is in a degraded or non-conforming condition such that the ability of a component to perform its specified safety function is significantly degraded and the condition could reasonably be expected to apply to other similar components in the plant. This new criterion is contained in section 50.73(a)(2)(ii)(C) as discussed below.

As a result, these proposed amendments would focus the reporting of conditions outside the design basis of the plant to the safety significant issues while reducing the number of reports under the current rules in order to minimize the reporting of less significant issues. In particular, the proposed amendments will help ensure that significant safety problems that could reasonably be expected to be applicable to similar components at the specific plant or at other plants will be identified and addressed although the specific licensee might determine that the system or structure remained operable, or that technical specification requirements were met. The proposed rules will provide that, consistent with the NRC's effort to obtain information for engineering studies of operational anomalies and trends and patterns analysis of operational occurrences, the NRC would be able to monitor the capability of safety-related components to perform their design-basis functions.

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[6] The LCO typically employs La, which is defined in Appendix J to 10 CFR Part 50 as the maximum allowable containment leak rate at pressure Pa, the calculated peak containment internal pressure related to the design basis accident. Minimum-pathway leak rate means the minimum leak rate that can be attributed to a penetration leakage path; for example, the smaller of either the inboard or outboard valve's individual leak rates.

Significantly degraded component(s) [section 50.73(a)(2)(ii)(C)]. This new reporting criterion would require reporting if a component is in a degraded or non-conforming condition such that the ability of the component to perform its specified safety function is significantly degraded and the condition could reasonably be expected to apply to other similar components in the plant. It would be added to ensure that design basis or other discrepancies would continue to be reported if the capability to perform a specified safety function is significantly degraded and the condition has generic implications. On the other hand, if the degradations are not significant or the condition does not have generic implications, reporting would not be required under this criterion.

For example, at one plant several normally open valves in the low pressure safety injection system were routinely closed to support quarterly surveillance testing of the system. In reviewing the design basis and associated calculations, it was determined that the capability of the valves to open in the event of a large break loss-of-coolant accident (LOCA) combined with degraded grid voltage during a surveillance test was degraded. The licensee concluded that the valves would still be able to reopen under the postulated conditions and considered them operable. However, that conclusion could not be supported using the conservative standards established by Generic Letter 89-10. Pending determination of final corrective action, administrative procedures were implemented to preclude closing the valves. The event would be reportable because the capability of a component to perform its specified safety functions was significantly degraded and the same condition could reasonably be expected to apply to other similar components.

In another example, during a routine periodic inspection, jumper wires in the valve operators for three valves were found contaminated with grease which was leaking from the limit switch gear box. The cause was overfilling of the grease box, as a result of following a generic maintenance procedure. The leakage resulted in contamination and degradation of the

electrical components which were not qualified for exposure to grease. This could result in valve malfunction(s). The conditions were corrected and the maintenance procedures were changed. The event would be reportable because the capability of several similar components to perform their specified safety functions could be significantly degraded.

In a further example, while processing calculations it was determined that four motor operated valves within the reactor building were located below the accident flood level and were not qualified for that condition. Pending replacement with qualified equipment, the licensee determined that three of the valves had sufficiently short opening time that their safety function would be completed before they were submerged. The fourth valve was normally open and could remain open. After flooding, valve position indication could be lost, but valve position could be established indirectly using process parameter indications. The event would be reportable because the capability of several similar components to perform their specified safety functions could be significantly degraded.

An example of an event that would not be reportable is as follows. The motor on a motor-operated valve (MOV) burned out after repeated cycling for testing. This event would not be reportable because it is a single component failure, and while there might be similar MOVs in the plant, there is not a reasonable basis to think that other MOVs would be affected by this same condition. On the other hand, if several MOVs had been repeatedly cycled and then after some extended period of time one of the MOVs was found inoperable or significantly degraded because of that cycling, then the condition would be reportable.

Minor switch adjustments on MOVs would not be reported where they do not significantly affect the ability of the MOV to carry out its design-basis function and the cause of the adjustments is not a generic concern.

At one plant the switch on the radio transmitter for the auxiliary building crane was used to handle a spent fuel cask while two protective features had been defeated by wiring errors. A

new radio control transmitter had been procured and placed in service. Because the new controller was wired differently than the old one, the drum overspeed protection and spent fuel pool roof slot limit switch were inadvertently defeated. While the crane was found to be outside its design basis, this condition would not be reportable because the switch wiring deficiency could not reasonably be expected to affect any other components at the plant.

Condition not covered by the plant's operating and emergency procedures [section 50.72(b)(2)(ii)(C), and section 50.73(a)(2)(ii)(C)]. This criterion would be deleted because it does not result in worthwhile reports aside from those that would be captured by other reporting criteria such as:

(1) an unanalyzed condition that significantly affects plant safety;

(2) an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to: shut down the reactor and maintain it in a safe shutdown condition; remove residual heat; control the release of radioactive material; or mitigate the consequences of an accident;

(3) an event or condition that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded;

(4) an operation or condition prohibited by the plant's TS;

(5) an event or condition that results in actuation of any of the systems listed in the rules, as amended;

(6) an event that poses an actual threat to the safety of the nuclear power plant or significantly hampers site personnel in the performance of duties necessary for the safe operation of the nuclear power plant.

Manual or automatic actuation of any engineered safety feature ESF [current sections 50.72(b)(1)(iv) and (b)(2)(ii), replaced by new sections 50.72(b)(2)(iv), and section 50.73(a)(2)(iv)]. Currently, sections 50.72(b)(1)(iv) and (b)(2)(ii) provide the following

distinction: an event that results or should have resulted in ECCS discharge into the reactor coolant system is initially reportable within 1 hour; other ESF actuations are initially reportable within 4 hours. The new 10 CFR 50.72(b)(2)(iv) would eliminate this distinction because there would no longer be separate 1-hour and 4-hour categories of non-emergency reports for this criterion. There would only be 8-hour non-emergency reports for this criterion.

The new section 50.72(b)(2)(iv) would eliminate telephone reporting for invalid automatic actuation or unintentional manual actuation. These events are not significant and thus telephone reporting is not needed. However, the proposed amendments would not eliminate the requirement for a written report of an invalid actuation under 10 CFR 50.73. There is still a need for reporting of these events because they are used in making estimates of equipment reliability parameters, which in turn are needed to support the Commission's move towards risk-informed regulation. (See SECY-97-101, May 7, 1997, "Proposed Rule, 10 CFR 50.76, Reporting Reliability and Availability Information for Risk-significant Systems and Equipment," Attachment 3).

The term "any engineered safety feature (ESF), including the reactor protection system (RPS)," which currently defines the systems for which actuation must be reported in section 50.72(b)(2)(iv) and section 50.73(a)(2)(iv), would be replaced by a specific list of systems. The current definition has led to confusion and variability in reporting because there are varying definitions of what constitutes an ESF. For example, at some plants systems that are known to have high risk significance, such as emergency ac power, auxiliary feedwater, and reactor core isolation cooling are not considered ESFs. Furthermore, in many cases systems with much lower levels of risk significance, such as control room ventilation systems, are considered to be ESFs.

In the proposed amendments actuation would be reportable for the specific systems named in sections 50.72(b)(2)(iv) and 50.73(a)(2)(iv). This would result in consistent reporting

of events that result in actuation of these highly risk-significant systems. Reasonable consistency in reporting actuation of highly risk-significant systems is needed to support estimating equipment reliability parameters, which is important to several aspects of the move towards more risk-informed regulation, including more risk-informed monitoring of plant performance.

The specific list of systems in the proposed rule would also eliminate reporting for events of lesser significance, such as actuation of control room ventilation systems.

The specific list of systems in the proposed rule is similar to the list of systems currently provided in the reporting guidelines in NUREG-1022, Revision 1, with some minor revisions. It is based on systems for which actuation is frequently reported, and systems with relatively high risk-significance based on a sampling of plant-specific PRAs (see Draft Regulatory Guide DG-1046, "Guidelines for Reporting Reliability and Availability Information for Risk-Significant Systems and Equipment in Nuclear Power Plants," particularly Tables C-1 through C-5).

This proposal to list the systems in the rule is controversial and public comment is specifically invited in this area. In particular, three principal alternatives to the proposed rule have been identified for comment:

(1) Maintain the status quo. Under this alternative, the rule would continue to require reporting for actuation of “any ESF.” The guidance would continue to indicate that reporting should include as a minimum the system on the list.

(2) Require use of a plant-specific , risk-informed list. Under this alternative, the list of systems would be risk-informed, and plant-specific. Licensees would develop the list based on existing PRA analyses, judgment, and specific plant design. No list would be provided in the rule.

(3) Return to the pre-1998 situation (i.e., before publication of the reporting guidance in NUREG-1022, Revision 1). Under this alternative, the rule would continue to require reporting

for actuation of “any ESF.” The guidance would indicate that reporting should include those systems identified as ESF’s for each particular plant (e.g., in the FSAR).

With regard to this third alternative, it may be noted that this approach has the advantage of clarity and simplicity. There would be no need to develop a new list, and this is the practice that was followed from 1984-1997 without creating major problems. However, the lists of ESFs are not based on risk-significance. For example, emergency diesel generators (EDGs) are known to be highly risk-significant; however, at six plants, the EDGs are not considered to be ESFs. Similarly, auxiliary feedwater (AFW), systems at pressurized water reactors (PWRs) are known to be highly risk-significant; however, at a number of plants these systems are not considered to be ESFs. Also, reactor core isolation cooling (RCIC) systems at boiling water reactors (BWRs) are known to be highly risk significant; however, at a number of plants these systems are not considered to be ESFs. In contrast, at many plants, systems with much lower levels of risk significance, such as control room ventilation systems, are considered to be ESFs.

Event or condition that could have prevented fulfillment of the safety function of structures or systems that ... [current sections 50.72(b)(1)(ii) and (b)(2)(i), replaced by new sections 50.72(b)(2)(v) and (vi), and sections 50.73(a)(2)(v) and (vi)] The phrase "event or condition that alone could have prevented the fulfillment of the safety function of structures or systems ...." would be clarified by deleting the word "alone". This clarifies the requirements by more clearly reflecting the principle that it is necessary to consider other existing plant conditions in determining the reportability of an event or condition under this criterion. For example, if one train of a two train system is incapable of performing its safety function for one reason, and the other train is incapable of performing its safety function for a different reason, the event is reportable.

The term "at the time of discovery" would be added to section 50.72(b)(2)(v) to eliminate telephone notification for a condition that no longer exists, or no longer has an effect on required safety functions. For example, it might be discovered that some time ago both trains of a two train system were incapable of performing their safety function, but the condition was subsequently corrected and no longer exists. In another example, while the plant is shutdown, it might be discovered that during a previous period of operation a system was incapable of performing its safety function, but the system is not currently required to be operable. These events are considered significant, and an LER would be required, but there would be no need for telephone notification.

The phrase "occurring within three years of the date of discovery" would be added to section 50.73(a)(2)(v) to eliminate written LERs for conditions that have not existed during the previous three years. Such a historical event would now have less significance, and assessing reportability for earlier times can consume considerable resources. For example, assume that during a design review a discrepancy is found that affects the ability of a system to perform its safety function in a given specific configuration. If it is likely that the safety function could have been prevented, the answer should be reasonably apparent based on the knowledge and experience of the plant's operators and/or a review of operating records for the past three years. The very considerable effort required to review all records older than three years, in order to rule out the possibility, would not be warranted.

A new paragraph, section 50.72(b)(2)(vi) would be added to clarify section 50.72. The new paragraph would explicitly state that telephone reporting is not required under section 50.72(b)(2)(v) for single failures if redundant equipment in the same system was operable and available to perform the required safety function. That is, although <u>one train</u> of a system may be incapable of performing its safety function, reporting is not required under this criterion if that <u>system</u> is still capable of performing the safety function. This is the same principle that is

currently stated explicitly in section 50.73(a)(2)(vi) with regard to written LERs.

Major loss of emergency assessment capability, offsite response capability, or communication capability [current section 50.72(b)(2)(v), new section 50.72(b)(2)(xiii)]. The new section would be modified by adding the word "offsite" in front of the term "communications capability" to make it clear that the requirement does not apply to internal plant communication systems.

Airborne radioactive release... and liquid effluent release...[section 50.72(b)(2)(viii) and sections 50.73(a)(2)(viii) and 50.73(a)(2)(ix)]. The statement indicating reporting under section 50.72(b)(2)(viii) satisfies the requirements of section 20.2202 would be removed because it would not be correct. For example, some events captured by section 20.2202 would not be captured by section 50.72(b)(2)(viii). Also, the statement indicating that reporting under section 50.73(a)(2)(viii) satisfies the requirements of section 20.2203(a)(3) would be deleted because it would not be correct. Some events captured by section 20.2203(a)(3) would not be captured by section 50.73(a)(2)(viii).

The proposed extension of reporting deadlines to 8 hours in section 50.72 and 60 days in section 50.73 raises questions about whether similar changes should be made to Parts 20, 30, 40, 70, 72 and 76. The merits of such changes, which may vary for different types of licensees, will be addressed in separate actions.

Contents of LERs [sections 50.73(b)(2)(ii)(F)and 50.73(b)(2)(ii)(J)]. Paragraph (F) would be revised to correct the address of the NRC Library.

Paragraph (J) currently requires that the narrative section include the following specific information as appropriate for the particular event:

"(1) Operator actions that affected the course of the event, including operator errors, procedural deficiencies, or both, that contributed to the event.

(2) For each personnel error, the licensee shall discuss:

(i) Whether the error was a cognitive error (e.g., failure to recognize the actual plant condition, failure to realize which systems should be functioning, failure to recognize the true nature of the event) or a procedural error;

(ii) Whether the error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure;

(iii) Any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the error; and

(iv) The type of personnel involved (i.e., contractor personnel, utility-licensed operator, utility non-licensed operator, other utility personnel)."

The proposed amendment would change section 50.73(b)(2)(ii)(J) to simply require that the licensee discuss the causes and circumstances for each human performance related problem that contributed to the event. It is not necessary to specify the level of detail provided in the current rule, which is more appropriate for guidance. Details would continue to be provided in the reporting guidelines, as indicated in section 5.2.1 of the draft of Revision 2 to NUREG-1022. This draft report is being made available for public comment concurrently with the proposed rule, as discussed below under the heading “Revisions to Reporting Guidelines in NUREG-1022.”

Spent fuel storage cask problems [current sections 50.72(b)(2)(vii) and 72.16(a)(1), (a)(2), (b) and (c)]. Section 50.72(b)(2)(vii) would be deleted because these reporting criteria are redundant to the reporting criteria contained in sections 72.216(a)(1), (a)(2), and (b). Repetition of the same reporting criteria in different sections of the rules adds unnecessary complexity and is inconsistent with the current practice in other areas, such as reporting of safeguards events as required by section 73.71.

Also, a conforming amendment would be made to section 72.216. This is necessary because section 72.216(a) currently relies on section 50.72(b)(2)(vii), which would be deleted, to establish the time limit for initial notification. The amended section 72.216 would refer to sections 72.74 and 72.75 for initial notification and followup reporting requirements.

Assessment of Safety Consequences [section 50.73(b)(3)]. This section currently requires that an LER include an assessment of the safety consequences and implications of the event. This assessment must include the availability of other systems or components that could have performed the same function as the components and systems that failed during the event. It would be modified by adding a requirement to also include the status of components and systems that "are included in emergency or operating procedures and could have been used to recover from the event in case of an additional failure in the systems actually used for recovery." This information is needed to better support the NRC's assessment of the risk-significance of reported events.

Exemptions [section 50.73(f)]. This provision would be deleted because the exemption provisions in section 50.12 provide for granting of exemptions as warranted. Thus, including another, section-specific exemption provision in section 50.73 adds unnecessary complexity to the rules.

3. Revisions to Reporting Guidelines in NUREG-1022.

A draft report, NUREG-1022, Revision 2, "Event Reporting Guidelines, 10 CFR 50.72 and 50.73," is being made available for public comment concurrently with the proposed amendments to 10 CFR 50.72 and 50.73. The draft report is available for inspection in the NRC Public Document Room or it may be viewed and downloaded electronically via the interactive rulemaking web site established by NRC for this rulemaking, as discussed above

under the heading "ADDRESSES." Single copies may be obtained from the contact listed above under the heading "For Further Information Contact." In the draft report, guidance that is considered to be new or different is a meaningful way, relative to that provided in NUREG-1022, Revision 1, is indicated by redlining the appropriate text.

4. Reactor Oversight

The NRC is developing revisions to process for oversight of operating reactors, including inspection, assessment and enforcement processes. In connection with this effort, the NRC has considered the kinds of event reports that would be eliminated by the proposed rules and believes that the changes would not have a deleterious effect on the oversight process. Public comment is invited on whether or not this is the case. In particular, it is requested that if any examples to the contrary are known they be identified.

5. Enforcement.

The NRC intends to modify its existing enforcement policy in connection with the proposed amendments to sections 50.72 and 50.73. The philosophy of the proposed changes is to base the significance of the reporting violation on: (1) the reporting requirement, which will require reporting within time frames more commensurate with the significance of the underlying issues than the current rule; and (2) the impact that a late report may have on the ability of the NRC to fulfill its obligations of fully understanding issues that are required to be reported in order to accomplish its public health and safety mission, which in many cases involves reacting to reportable issues or events. As such, the NRC intends to revise the Enforcement Policy, NUREG-1600, Rev. 1 as follows:

(1) Appendix B, Supplement I.C - Examples of Severity Level III violations.

(a) Example 14 would be revised to read as follows - A failure to provide the required

one hour telephone notification of an emergency action taken pursuant to 10 CFR 50.54(x).

(b) An additional example would be added that would read as follows - A failure to provide a required 1-hour or 8-hour *non-emergency* telephone notification pursuant to 10 CFR 50.72.

(c) An additional example would be added that would read as follows - A late 8-hour notification that substantially impacts agency response.

(2) Appendix B, Supplement I.D -Examples of Severity Level IV violations.

(a) Example 4, would be revised to read as follows - A failure to provide a required 60-day written LER pursuant to 10 CFR 50.73.

These changes in the Enforcement Policy would be consistent with the overall objective of the rule change of better aligning the reporting requirements with the NRC's reporting needs. The Enforcement Policy changes would correlate the Severity Level of the infractions with the relative importance of the information needed by the NRC.

Section IV.D of the Enforcement Policy provides that the Severity Level of an untimely report may be reduced depending on the individual circumstances. In deciding whether the Severity Level should be reduced for an untimely 1-hour or 8-hour *non-emergency* report the impact that the failure to report had on any agency response would be considered. For example, if a delayed 8-hour reportable event impacted the timing of a followup inspection that was deemed necessary, then the Severity Level would not normally be reduced. Similarly, a late notification that delayed the NRC's ability to perform an engineering analysis of a condition to determine if additional regulatory action was necessary would generally not be considered for disposition at a reduced Severity Level. Additionally, late reports filed in cases where the NRC had to prompt the licensee to report would generally not be subject to disposition at reduced

Severity Level and the Severity Level for failure to submit a timely Licensee Event Report (LER) would not be reduced to a minor violation.

In accordance with Appendix C of the Enforcement Policy, " Interim Enforcement Policy for Severity Level IV Violations Involving Activities of Power Reactor Licensees," the failure to file a 60-day LER would normally be dispositioned as a Non-Cited Violation (NCV). Repetitive failures to make LER reports indicative of a licensee's inability to recognize reportable conditions, such that it is not likely that the NRC will be made aware of operational, design and configuration issues deemed reportable pursuant to 10 CFR 50.73, will be considered for categorization at Severity Level III. This disposition may be warranted since such licensee performance impacts the ability of the NRC to fulfill its regulatory obligations.

6. Electronic Reporting.

The NRC is currently planning to implement an electronic document management and reporting program, known as the Agency-wide Document Access and Management System (ADAMS), that will in general provide for electronic submittal of many types of reports, including LERs. Accordingly, no separate rulemaking effort to provide for electronic submittal of LERs is contemplated.

7. Schedule.

The current schedule is as follows:

05/28/99 Conduct public workshop to discuss proposed rule and draft reporting guidelines (14 days after publication in Federal Register)

6/14/99 Public comments due to OMB (30 days after publication)

7/13/99 Receive OMB approval (60 days after publication)

07/30/99	Public comments due to NRC (75 days after publication)
08/13/99	Provide final rule and guidelines to NRC staff rulemaking group
09/24/99	Provide final rule and guidelines to the formal concurrence chain
10/29/99	Provide final rule and guidelines to CRGR and ACRS
12/10/99	Complete briefings of CRGR and ACRS
01/14/00	Provide final rule and guidelines to Commission
02/25/00	Publish final rule and guidelines

8. State Input.

Many States (Agreement States and Non-Agreement States) have agreements with power reactors to inform the States of plant issues. State reporting requirements are frequently triggered by NRC reporting requirements. Accordingly, the NRC seeks State comment on issues related to the proposed amendments to power reactor reporting requirements.

Plain Language

The President's Memorandum dated June 1, 1998, entitled, “Plain Language in Government Writing,” directed that the Federal government’s writing be in plain language. The NRC requests comments on this proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent to the address listed above.

V. Environmental Impact: Categorical Exclusion.

The NRC has determined that this proposed regulation is the type of action described in categorical exclusion 10 CFR 51.22(c)(3)(iii). Therefore neither an environmental impact statement nor an environmental assessment has been prepared for this proposed regulation.

VI. Backfit Analysis.

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to information collection and reporting requirements such as those contained in the proposed rule. Therefore, a backfit analysis has not been prepared. However, as discussed below, the NRC has prepared a regulatory analysis for the proposed rule, which examines the costs and benefits of the proposed requirements in this rule. The Commission regards the regulatory analysis as a disciplined process for assessing information collection and reporting requirements to determine that the burden imposed is justified in light of the potential safety significance of the information to be collected.

VII. Regulatory Analysis.

The Commission has prepared a draft regulatory analysis on this proposed rule. The analysis examines the costs and benefits of the alternatives considered by the Commission. The draft analysis is available for inspection in the NRC Public Document Room or it may be viewed and downloaded electronically via the interactive rulemaking web site established by NRC for this rulemaking, as discussed above under the heading "ADDRESSES." Single copies may be obtained from the contact listed above under the heading "For Further Information Contact."

The Commission requests public comment on this draft analysis. Comments on the draft analysis may be submitted to the NRC as discussed above under the heading "ADDRESSES."

VIII. Paperwork Reduction Act Statement

This proposed rule would amend information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule has been submitted to the Office of Management and Budget for review and approval of the information collection requirements.

The public reporting burden for the currently existing reporting requirements in 10 CFR 50.72 and 50.73 is estimated to average about 790 hours per response (i.e., per commercial nuclear power reactor per year) including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. It is estimated that the proposed amendments would impose a one time implementation burden of about 200 hours per reactor, after which there would be a recurring annual burden reduction of about 200 hours per reactor per year. The U.S. Nuclear Regulatory Commission is seeking public comment on the potential impact of the information collection contained in the proposed rule and on the following issues:

Is the proposed information collection necessary for the proper performance of the NRC, including whether the information will have practical utility?

Is the estimate of burden accurate?

Is there a way to enhance the quality, utility, and clarity of the information to be collected?

How can the burden of the information collection be minimized, including the use of automated collection techniques?

Send comments on any aspect of this proposed information collection, including suggestions for reducing this burden, to the Information and Records Management Branch (T-5 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001 or by Internet electronic mail to BJS1@NRC.GOV; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150AF98), Office of Management and Budget, Washington, DC 20503.

Comments to OMB on the information collections or on the above issues should be submitted by (insert date 30 days after publication in the Federal Register). Comments received after this date will be considered if it is practical to do so, but consideration cannot be ensured for comments received after this date.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a currently valid OMB control number.

IX. Regulatory Flexibility Certification.

In accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Commission certifies that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. This proposed rule affects only the licensing and operation of nuclear power plants. The companies that own these plants do not fall within the scope of

the definition of "small entities" set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

X. Proposed Amendments.

List of Subjects

10 CFR Part 50: Antitrust, Classified information, Criminal penalties, Fire prevention, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

10 CFR Part 72: Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Reporting and recordkeeping requirements, Security measures, and Spent fuel.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 553, the NRC is proposing to adopt the following amendments to 10 CFR Part 50 and 10 CFR Part 70.

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

The authority citation for Part 50 continues to read as follows:

AUTHORITY: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851).

Section 50.10 also issued under secs. 101, 185, 68 Stat. 955 as amended (42 U.S.C. 2131, 2235), sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

1. Section 50.72 is revised by amending paragraphs (a) and (b) to read as follows:

§ 50.72 Immediate notification requirements for operating nuclear power reactors.

(a) ***General requirements.***[7] **(1)** Each nuclear power reactor licensee licensed under § 50.21(b) or § 50.22 of this part shall notify the NRC Operations Center via the Emergency Notification System of:

(i) The declaration of any of the Emergency Classes specified in the licensee's approved Emergency Plan;[8] or

(ii) Of those non-Emergency events specified in paragraph (b) of this section.

(2) If the Emergency Notification System is inoperative, the licensee shall make the required notifications via commercial telephone service, other dedicated telephone system, or any other method which will ensure that a report is made as soon as practical to the NRC

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[7] Other requirements for immediate notification of the NRC by licensed operating nuclear power reactors are contained elsewhere in this chapter, in particular §§ 20.1906, 20.2202, 50.36, 72.74, 72.75, and 73.71.

[8] These Emergency Classes are addressed in Appendix E of this part.

Operations Center.[9, 10]

(3) The licensee shall notify the NRC immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes.

(4) The licensee shall activate the Emergency Response Data System (ERDS)[11] as soon as possible but not later than one hour after declaring an emergency class of alert, site area emergency, or general emergency. The ERDS may also be activated by the licensee during emergency drills or exercises if the licensee's computer system has the capability to transmit the exercise data.

(5) When making a report under paragraph (a)(1) of this section, the licensee shall identify:

(i) The Emergency Class declared; or

(ii) Either paragraph (b)(1), "One-Hour Report," or paragraph (b)(2) "Eight-Hour Report," as the paragraph of this section requiring notification of the Non-Emergency Event.

(b) *Non-emergency events* – (1) *One-Hour reports.* If not reported as a declaration of the Emergency Class under paragraph (a) of this section, the licensee shall notify the NRC as soon as practical and in all cases within one hour of the occurrence of any deviation from the plant's Technical Specifications authorized pursuant to § 50.54(x) of this part.

(2) *Eight-hour reports.* If not reported under paragraphs (a) or (b)(1) of this section, the licensee shall notify the NRC as soon as practical and in all cases within eight hours of the occurrence of any of the following:

(i) The initiation of any nuclear plant shutdown required by the plant’s Technical

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[9] Commercial telephone number of the NRC Operations Center is (301) 816-5100.

[10] [Reserved]

[11] Requirements for ERDS are addressed in Appendix E, Section VI.

Specifications.

(ii) Any event or condition that results in:

(A) The condition of the nuclear power plant, including its principal safety barriers, being seriously degraded; or

(B) The nuclear power plant being in an unanalyzed condition that significantly affects plant safety.

(iii) Any natural phenomenon or other external condition that poses an actual threat to the safety of the nuclear power plant or significantly hampers site personnel in the performance of duties necessary for the safe operation of the plant.

(iv)(A) Any event or condition that results in intentional manual actuation or valid automatic actuation of any of the systems listed in paragraph (b)(2)(iv)(B) of this section, except when the actuation results from and is part of a pre-planned sequence during testing or reactor operation.

(B) The systems to which the requirements of paragraph (b)(2)(iv)(A) of this section apply are:

(1) Reactor protection system (reactor scram, reactor trip).

(2) Emergency core cooling systems (ECCS) for pressurized water reactors (PWRs) including: high-head, intermediate-head, and low-head injection systems and the low pressure injection function of residual (decay) heat removal systems.

(3) ECCS for boiling water reactors (BWRs) including: high-pressure and low-pressure core spray systems; high-pressure coolant injection system; feedwater coolant injection system; low pressure injection function of the residual heat removal system; and automatic depressurization system.

(4) BWR isolation condenser system and reactor core isolation cooling system.

(5) PWR auxiliary feedwater system.

(6) Containment systems including: containment and reactor vessel isolation systems

(general containment isolation signals affecting numerous valves and main steam isolation valve [MSIV] closure signals in BWRs) and containment heat removal and depressurization systems, including containment spray and fan cooler systems.

(7) Emergency ac electrical power systems, including: emergency diesel generators (EDGs) and their associated support systems; hydroelectric facilities used in lieu of EDGs at the Oconee Station; safety related gas turbine generators; BWR dedicated Division 3 EDGs and their associated support systems; and station blackout diesel generators (and black-start gas turbines that serve a similar purpose) which are started from the control room and included in the plant's operating and emergency procedures.

(8) Anticipated transient without scram (ATWS) mitigating systems.

(9) Service water (standby emergency service water systems that do not normally run).

(v) Any event or condition that at the time of discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to:

(A) Shut down the reactor and maintain it in a safe shutdown condition;

(B) Remove residual heat;

(C) Control the release of radioactive material, or

(D) Mitigate the consequences of an accident.

(vi) Events covered in paragraph (b)(2)(v) of this section may include one or more procedural errors, equipment failures, and/or discovery of design, analysis, fabrication, construction, and/or procedural inadequacies. However, individual component failures need not be reported pursuant to this paragraph if redundant equipment in the same system was operable and available to perform the required safety function.

(vii) Reserved.

(viii) (A) Any airborne radioactive release that, when averaged over a time period of 1 hour, results in concentrations in an unrestricted area that exceed 20 times the applicable concentration specified in appendix B to part 20, table 2, column 1.

(B) Any liquid effluent release that, when averaged over a time of 1 hour, exceeds 20 times the applicable concentration specified in appendix B to part 20, table 2, column 2, at the point of entry into the receiving waters (i.e., unrestricted area) for all radionuclides except tritium and dissolved noble gases.

(ix) Any event that poses an actual threat to the safety of the nuclear power plant or significantly hampers site personnel in the performance of duties necessary for the safe operation of the nuclear power plant including fires, toxic gas releases, or radioactive releases.

(x) Any event requiring the transport of a radioactively contaminated person to an offsite medical facility for treatment.

(xi) Any event or situation, related to the health and safety of the public or onsite personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made. Such an event may include an onsite fatality or inadvertent release of radioactively contaminated materials.

(xii) Any event that results in a major loss of emergency assessment capability, offsite response capability, or offsite communications capability (e.g., significant portion of control room indication, Emergency Notification System, or offsite notification system).

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2. Section 50.73 is revised by amending sections (a), (b)(2)(ii)(F), (b)(2)(ii)(J), (b)(3), (d), and (f) to read as follows:

§ 50.73 Licensee event report system.

(a) ***Reportable events.*** **(1)** The holder of an operating license for a nuclear power plant (licensee) shall submit a Licensee Event Report (LER) for any event of the type described in this paragraph within 60 days after the discovery of the event. Unless otherwise specified in this section, the licensee shall report an event regardless of the plant mode or power level, and regardless of the significance of the structure, system, or component that initiated the event.

(2) *The licensee shall report:*

(i)(A) The completion of any nuclear plant shutdown required by the plant's Technical Specifications.

(B) Any operation or condition occurring within three years of the date of discovery which was prohibited by the plant's Technical Specifications, except when:

(i) The technical specification is administrative in nature; or

(ii) The event consists solely of a case of a late surveillance test where the oversight is corrected, the test is performed, and the equipment is found to be capable of performing its specified safety functions.

(C) Any deviation from the plant's Technical Specifications authorized pursuant to § 50.54(x) of this part.

(ii) Any event or condition that resulted in:

(A) The condition of the nuclear power plant, including its principal safety barriers, being seriously degraded;

(B) The nuclear power plant being in an unanalyzed condition that significantly affects plant safety; or

(C) A component being in a degraded or non-conforming condition such that the ability

of the component to perform its specified safety function is significantly degraded and the condition could reasonably be expected to affect other similar components in the plant.

(iii) Any natural phenomenon or other external condition that posed an actual threat to the safety of the nuclear power plant or significantly hampered site personnel in the performance of duties necessary for the safe operation of the nuclear power plant.

(iv)(A) Any event or condition that resulted in manual or automatic actuation of any of the systems listed in paragraph (a)(2)(iv)(B) of this section, except when:

(1) The actuation resulted from and was part of a pre-planned sequence during testing or reactor operation; or

(2) The actuation was invalid and;

(i) Occurred while the system was properly removed from service; or

(ii) Occurred after the safety function had been already completed.

(B) The systems to which the requirements of paragraph (a)(2)(iv)(A) of this section apply are:

(1) Reactor protection system (reactor scram, reactor trip).

(2) Emergency core cooling systems (ECCS) for pressurized water reactors (PWRs) including: high-head, intermediate-head, and low-head injection systems and the low pressure injection function of residual (decay) heat removal systems.

(3) ECCS for boiling water reactors (BWRs) including: high-pressure and low-pressure core spray systems; high-pressure coolant injection system; feedwater coolant injection system; low pressure injection function of the residual heat removal system; and automatic depressurization system.

(4) BWR isolation condenser system and reactor core isolation cooling system.

(5) PWR auxiliary feedwater system.

(6) Containment systems including: containment and reactor vessel isolation systems (general containment isolation signals affecting numerous valves and main steam isolation

valve [MSIV] closure signals in BWRs) and containment heat removal and depressurization systems, including containment spray and fan cooler systems.

(7) Emergency ac electrical power systems, including: emergency diesel generators (EDGs) and their associated support systems; hydroelectric facilities used in lieu of EDGs at the Oconee Station; safety related gas turbine generators; BWR dedicated Division 3 EDGs and their associated support systems; and station blackout diesel generators (and black-start gas turbines that serve a similar purpose) which are started from the control room and included in the plant's operating and emergency procedures.

(8) Anticipated transient without scram (ATWS) mitigating systems.

(9) Service water (standby emergency service water systems that do not normally run).

(v) Any event or condition occurring within three years of the date of discovery that could have prevented the fulfillment of the safety function of structures or systems that are needed to:

(A) Shut down the reactor and maintain it in a safe shutdown condition;

(B) Remove residual heat;

(C) Control the release of radioactive material; or

(D) Mitigate the consequences of an accident.

(vi) Events covered in paragraph (a)(2)(v) of this section may include one or more procedural errors, equipment failures, and/or discovery of design, analysis, fabrication, construction, and/or procedural inadequacies. However, individual component failures need not be reported pursuant to this paragraph if redundant equipment in the same system was operable and available to perform the required safety function.

(vii) Any event where a single cause or condition caused at least one independent train or channel to become inoperable in multiple systems or two independent trains or channels to become inoperable in a single system designed to:

(A) Shut down the reactor and maintain it in a safe shutdown condition;

(B) Remove residual heat;

(C) Control the release of radioactive material; or

(D) Mitigate the consequences of an accident.

(viii)(A) Any airborne radioactive release that, when averaged over a time period of 1 hour, resulted in airborne radionuclide concentrations in an unrestricted area that exceeded 20 times the applicable concentration limits specified in appendix B to part 20, table 2, column 1.

(B) Any liquid effluent release that, when averaged over a time period of 1 hour, exceeds 20 times the applicable concentrations specified in appendix B to part 20, table 2, column 2, at the point of entry into the receiving waters (i.e., unrestricted area) for all radionuclides except tritium and dissolved noble gases.

(ix) Any event that posed an actual threat to the safety of the nuclear power plant or significantly hampered site personnel in the performance of duties necessary for the safe operation of the nuclear power plant including fires, toxic gas releases, or radioactive releases.

(b) ***Contents.***

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(F) The Energy Industry Identification System component function identifier and system name of each component or system referred to in the LER.

(1) The Energy Industry Identification System is defined in: IEEE Std 803-1983 (May 16, 1983) Recommended Practice for Unique Identification in Power Plants and Related Facilities--Principles and Definitions.

(2) IEEE Std 803-1983 has been approved for incorporation by reference by the Director of the Federal Register.

A notice of any changes made to the material incorporated by reference will be published in the *Federal Register*. Copies may be obtained from the Institute of Electrical and Electronics Engineers, 345 East 47th Street, New York, NY 10017. IEEE Std 803-1983 is available for inspection at the NRC's Technical Library, which is located in the Two White Flint North building, 11545 Rockville Pike, Rockville, Maryland; and at the Office of the Federal Register, 1100 L Street, NW, Washington, DC.

* * * * *

(J) For each human performance related problem that contributed to the event, the licensee shall discuss the cause(s) and circumstances.

* * * * *

(3) An assessment of the safety consequences and implications of the event. This assessment must include the availability of systems or components that:

(i) Could have performed the same function as the components and systems that failed during the event, or

(ii) Are included in emergency or operating procedures and could have been used to recover from the event in case of an additional failure in the systems actually used for recovery.

* * * * *

(d) ***Submission of reports.*** Licensee Event Reports must be prepared on Form NRC 366 and submitted within 60 days of discovery of a reportable event or situation to the U.S. Nuclear Regulatory Commission, as specified in § 50.4.

(e) ***Report legibility.*** The reports and copies that licensees are required to submit to the Commission under the provisions of this section must be of sufficient quality to permit legible reproduction and micrographic processing.

(f) Reserved.

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PART 72 - LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

The authority citation for Part 72 continues to read as follows:

AUTHORITY: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236,

2237, 2238, 2282); sec. 274, Pub. L. 86-373, 73 Stat. 688, as amended (42 U.S.C. 5841, 5842, 5846); Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 7902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97-425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100-203, 101 Stat. 1330-232, 1330-236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97-425, 96 Stat. 2202, 2203, 2204, 2222, 2224, (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

3. Section 72.216 is revised by amending paragraphs (a), (b), and (c) to read as follows:

§ 72.216 Reports

(a) Reserved.

(b) Reserved.

(c) The general licensee shall make initial and written reports in accordance with §§ 72.74 and 72.75.

* * * * *

Dated at Rockville, Maryland, this _____ day of _____, 1999.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook

Secretary of the Commission